Index of Claims

| 1  | Application No.      | Applicant(s) |       |
|----|----------------------|--------------|-------|
|    | 10/646,590           | KOBAYASHI ET | Γ AL. |
| T  | Examiner             | Art Unit     |       |
| ١, | Victor A Mandala Jr. | 2826         |       |

| √ | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla      | aim      | n Date   |                 |   |             |                           | ]         | Claim Date |               |      |             |              |          |          | Cla    | im        | Date     |          |          |       |          |          |            |           |          |          |              |   |          |          |          |               |
|----------|----------|----------|-----------------|---|-------------|---------------------------|-----------|------------|---------------|------|-------------|--------------|----------|----------|--------|-----------|----------|----------|----------|-------|----------|----------|------------|-----------|----------|----------|--------------|---|----------|----------|----------|---------------|
|          |          |          |                 |   |             |                           |           | П          |               |      |             | <del>-</del> |          |          |        |           |          |          |          |       | Г        |          | ai         |           |          | Ì        |              |   |          |          |          |               |
| Final    | Original | 9/2/04   |                 |   |             |                           |           |            |               | - A  | Final       | Original     | 9/2/04   | - 1      |        |           |          |          |          |       | 3        | <u> </u> | Originat   | 9/2/04    |          |          |              |   |          |          |          |               |
| ፲፰       | )<br>Ž   | 6        |                 |   |             |                           |           |            | 1             |      | ίΞ          | Ö.           | 9/2      |          |        |           | - 1      |          |          |       | Ü        | <u>-</u> | Ä          | 6         |          |          |              | ľ |          |          |          |               |
|          |          |          | Ш               |   |             |                           |           | $\dashv$   |               |      |             |              |          |          |        | Ш         | _        |          |          |       | L        | _        |            |           | _        | _        |              |   |          | _        | _        | ᅴ             |
|          | 1        | _        | Ш               |   |             | Ш                         |           |            |               | 1    |             | 51           | 1        | $\perp$  | $\bot$ | $\sqcup$  |          | $\perp$  |          | 4     | $\perp$  | _        | 101        | N         | _        | _        |              |   |          | _        | _        | _             |
|          | 2        | _        | Ш               |   | _           |                           |           | $\dashv$   | _             | ļi.  |             | 52           | 1        | $\dashv$ | $\bot$ | Ш         | _        |          |          | 4     | <u>_</u> |          | 102        | N         |          | _        |              |   |          | _        |          |               |
|          | 3        | <u> </u> | Н               |   | _           | <u> </u>                  | -         | -+         |               |      |             | 53           | 1        | _        | +      | $\vdash$  |          | +        | _        | 4"    | -        | -        | 103        | N         | -        |          |              |   |          | $\dashv$ | _        | $\dashv$      |
| <u> </u> | 4        | _        | $\vdash$        |   |             | Ш                         |           | -          |               | -    |             | 54           | 7        | -        | +      | $\vdash$  |          | +        | +        | 4     | -        | $\dashv$ | 104<br>105 | N         | -        |          |              |   | _        | -        | -        |               |
| <u> </u> | 5<br>6   |          | Н               | _ | -           | <del> </del>              | +         | $\dashv$   | +             | -    |             | 55<br>56     | 7        | $\vdash$ | +      | +         |          | $\dashv$ |          | 4.    | $\vdash$ |          | 106        | N<br>N    |          | $\dashv$ |              |   |          |          |          | -1            |
| <u> </u> | 7        | -        | Н               |   |             | $\vdash$                  |           | -          |               | -    |             | 57           | =        | +        | +      | $\vdash$  |          | +        | +        | ╣     | $\vdash$ |          | 107        | N         |          |          |              |   | -        | $\dashv$ | $\dashv$ | $\dashv$      |
| $\vdash$ | 8        | -        | Н               | _ | -           | H                         |           | $\dashv$   | +             | -    |             | 58           | 0        | +        | +      | +         | -+       | $\dashv$ | +        | - 1.9 | ·        | +        | 108        | N         | $\dashv$ | $\dashv$ |              |   |          | $\dashv$ | $\dashv$ | $\dashv$      |
|          | 9        | $\vdash$ |                 |   |             | Н                         |           | $\dashv$   |               | 1    |             | 59           | =        | -        |        | $\vdash$  | -        | $\dashv$ | +        | Η.    | $\vdash$ | $\dashv$ | 109        | N         | $\dashv$ | $\dashv$ |              |   |          | $\dashv$ | $\dashv$ | $\dashv$      |
| $\vdash$ | 10       | $\vdash$ | H               |   | _           | H                         |           | $\dashv$   | +             | -    |             | 60           | 0        | $\vdash$ | +      | +         |          | 十        | _        | ┨     | -        | $\dashv$ | 110        | N         | -1       | ᅱ        |              |   |          | -        |          |               |
|          | 11       | $\vdash$ | Н               | - |             | Н                         |           | $\dashv$   | +             |      |             | 61           | =        |          |        | $\vdash$  |          | $\dashv$ | $\top$   | ┪.    | $\vdash$ | $\dashv$ | 111        | N         | $\dashv$ | $\dashv$ |              |   |          |          | $\dashv$ |               |
|          | 12       | $\vdash$ | $\vdash$        |   |             |                           | $\vdash$  | $\dashv$   |               | 1    |             | 62           | 0        | -        | +      | $\forall$ | $\dashv$ | $\dashv$ | +        | 1     | $\vdash$ | $\dashv$ | 112        | N         | $\dashv$ |          |              |   |          | $\dashv$ |          | $\dashv$      |
|          | 13       | Н        |                 |   | _           |                           | $\Box$    | $\dashv$   | $\top$        | 1    |             | 63           | =        | +        | +      | $\vdash$  | $\dashv$ | $\dashv$ | +        | 7     |          | _        | 113        | Ň         |          |          |              |   | Н        | _        | $\dashv$ |               |
|          | 14       | Г        | П               |   |             | П                         | $\Box$    |            |               | , i. |             | 64           | 0        |          | $\top$ | П         | $\dashv$ | $\dashv$ | 十        | 1     |          | $\dashv$ | 114        |           | $\dashv$ | $\neg$   |              |   | П        | $\dashv$ | $\dashv$ | $\neg$        |
|          | 15       |          | $\Box$          |   |             |                           |           | $\dashv$   | $\top$        | 1    |             | 65           | =        |          | $\top$ | П         |          | 7        | ┪        | 1     |          | $\neg$   | 115        |           |          |          |              |   | П        | $\Box$   |          | $\neg$        |
|          | 16       |          |                 |   |             |                           |           | T          |               |      |             | 66           | 0        |          |        | Ħ         |          | T        | 1        | ┪.    |          |          | 116        | N         | ╗        |          |              |   |          |          |          |               |
|          | 17       |          |                 |   |             |                           |           |            |               | 1    |             | 67           | =        |          |        |           |          |          |          | 1.    |          | T        | 117        | N         |          |          |              |   |          |          |          |               |
|          | 18       |          |                 |   |             |                           |           |            | $\neg \vdash$ | 7    |             | 68           | 0        | _        |        |           |          |          |          | 7     |          | T        | 118        | N         | T        | T        |              |   |          |          |          |               |
|          | 19       |          | П               |   |             |                           |           |            |               | ]    |             | 69           | 1        |          |        |           |          |          |          | ٦.    |          |          | 119        |           |          |          |              |   | -        |          |          |               |
|          | 20       |          |                 |   |             |                           |           |            |               | ],   |             | 70           | 1        |          |        |           |          |          |          | ]:    | €        |          | 120        |           |          |          |              |   |          |          |          |               |
|          | 21       |          |                 |   |             |                           |           |            |               |      |             | 71           | =        |          |        |           |          |          |          | ]:5   | :[       |          | 121        |           |          |          |              |   |          |          |          |               |
|          | 22       |          |                 |   |             |                           |           |            |               | ] .  |             | 72           | 0        |          |        |           |          |          |          | ]:.   |          |          | 122        |           |          |          |              |   |          |          |          |               |
|          | 23       |          |                 |   |             |                           |           |            |               |      |             | 73           | <b>√</b> |          |        |           |          |          |          | ] :   |          |          | 123        |           |          |          |              |   |          |          |          |               |
|          | 24       |          |                 |   |             |                           |           | _          |               | ]    |             | 74           |          |          |        |           |          | _        |          | 4     |          | 4        | 124        | _         |          | _        |              |   |          |          |          | _             |
|          | 25       |          | Ш               |   |             |                           |           | _          |               |      |             | 75           | 1        |          |        | $\perp$   |          |          |          | 4     | L        | _        | 125        | _         |          |          |              |   |          |          |          | ᆜ             |
| <u> </u> | 26       |          |                 |   |             |                           |           |            |               |      |             | 76           | 1        |          |        |           |          | _        |          | -}    | _        | _        | 126        |           |          | _        |              |   |          |          |          |               |
|          | 27       |          | Ш               |   |             | $ldsymbol{ldsymbol{eta}}$ |           | _          | _             | -    |             | 77           | =        |          | _      |           | $\perp$  | _        | _        | վ ՝   | _        | _        | 127        | _         | _        | _        |              |   |          |          | _        | ᆜ             |
|          | 28       | ļ        |                 |   |             |                           |           | _          | $\perp$       | -    |             | 78           | 00       |          | -      |           |          | 4        |          | 4     | <u> </u> |          | 128        | -         |          |          |              |   |          |          | _        |               |
|          | 29       | _        | Н               |   |             | $\vdash$                  | _         | -          | $\perp$       | -    |             | 79           |          | -        | -      | 1         |          | _        |          | 4 :   | -        |          | 129        |           |          | $\dashv$ |              |   | -        |          | _        | _             |
| <u> </u> | 30       | <u> </u> |                 | _ |             | -                         |           | -          | +             | -    |             | 80           | - =      |          |        | -         | $\vdash$ | -        |          | 4 .   | -        |          | 130        |           |          |          |              |   | -        |          | _        | $\dashv$      |
|          | 31<br>32 |          | $\vdash$        |   |             | _                         |           |            | -             |      |             | 81<br>82     | 1        | $\dashv$ | +      | +         | $\dashv$ | +        | +        | ╣.    | ⊢        | $\dashv$ | 131<br>132 | $\dashv$  | $\dashv$ | -        |              |   | _        |          |          | $\dashv$      |
|          | 33       |          | H               |   |             |                           | -         |            | -             | ł    | <b></b>     | 83           | =        | -+       | +      | +         | $\dashv$ | +        | -        | ╣     | $\vdash$ | $\dashv$ | 133        | $\dashv$  | $\dashv$ | -        |              |   | _        |          |          |               |
| <u> </u> | 34       | 1        | $\vdash$        |   | -           | -                         | $\vdash$  |            | +             | -    | <del></del> | 84           | 0        | -+       | +      | +         | $\vdash$ | +        | +        | 1:    | $\vdash$ | $\dashv$ | 134        |           |          |          | <u> </u>     | _ | -        | $\dashv$ | -        | 닉             |
| -        | 35       | 7        |                 |   | <u> </u>    | <del> </del>              | $\vdash$  |            | +             | 1    |             | 85           | 0        | +        | +      | $\vdash$  | $\vdash$ | +        | +        | - T.  | $\vdash$ | $\dashv$ | 135        | $\dashv$  | $\dashv$ | $\dashv$ |              |   | $\vdash$ |          |          |               |
|          | 36       | 1        | $\vdash \vdash$ | _ | $\vdash$    | $\vdash$                  |           | $\dashv$   | - -           |      |             | 86           | =        |          | +      | +         | $\vdash$ | $\dashv$ | +        | ١.    | $\vdash$ | $\dashv$ | 136        | $\dashv$  | $\dashv$ | $\dashv$ |              | - | $\vdash$ | $\dashv$ | -        | $\dashv$      |
| -        | 37       | V        | $\vdash$        |   | <del></del> | $\vdash$                  | $\vdash$  | $\dashv$   | +             |      | <del></del> | 87           | 7        | -+-      | +      | +         | -        | $\dashv$ | $\dashv$ | ┪…    | $\vdash$ | $\dashv$ | 137        | $\dashv$  | $\dashv$ | $\dashv$ | _            |   | $\vdash$ | $\vdash$ | $\dashv$ | $\dashv$      |
|          | 38       | Ť        | $\vdash \vdash$ | _ |             | $\vdash$                  | $\vdash$  | $\dashv$   | +             | 1    |             | 88           | 1        | +        | +      | +         | -        | +        | +        | ┪     | -        | -+       | 138        | $\dashv$  | -        | $\dashv$ | <del>-</del> | _ | $\vdash$ | $\dashv$ | -        | $\dashv$      |
|          | 39       | 1        | H               |   |             | $\vdash$                  | $\forall$ | $\dashv$   | +             | 1    |             | 89           | =        | +        | +      |           | -        | $\dashv$ | +        | ١.    | $\vdash$ | $\dashv$ | 139        |           | $\neg$   |          |              |   | $\vdash$ |          | $\dashv$ | $\dashv$      |
|          | 40       | Ì        | $\vdash$        |   | $\vdash$    | $\vdash$                  | $\vdash$  | 1          | $\top$        | 1    | <u> </u>    | 90           | 1        | $\vdash$ | +      | Ħ         | $\vdash$ | $\dashv$ | $\dashv$ | 1.    | H        | $\dashv$ | 140        | $\exists$ | 1        | -        |              |   |          |          | -        | $\dashv$      |
|          | 41       | Ì        | $\vdash$        |   |             |                           | H         | 1          | $\top$        | 1    |             | 91           | V        | -        | +      | $\vdash$  | -        | 十        | $\dashv$ | 1     |          | $\dashv$ | 141        | $\neg$    | $\dashv$ | $\dashv$ |              |   |          |          |          | $\exists$     |
|          | 42       | 1        | H               |   |             | П                         | H         | $\dashv$   | ┪             | 1.   |             | 92           | =        |          | $\top$ |           | _        | 十        | $\top$   | 7     |          |          | 142        | $\neg$    | $\dashv$ | $\dashv$ |              |   |          |          |          | $\dashv$      |
|          | 43       | 1        |                 |   |             |                           |           |            | $\top$        | 1.   |             | 93           | 0        |          |        | П         |          | $\dashv$ | $\top$   | 1     | $\vdash$ |          | 143        |           | 1        | $\neg$   |              |   |          |          | $\neg$   | $\overline{}$ |
|          | 44       | 1        |                 |   |             |                           |           |            |               | ]    |             | 94           | 0        |          |        |           |          |          |          |       |          | $\neg$   | 144        |           |          |          |              |   |          |          |          |               |
|          | 45       | 1        |                 |   |             |                           |           |            |               | ]    |             | 95           | 11       |          |        |           |          |          |          | ]     |          | T        | 145        |           |          |          |              |   |          |          |          |               |
|          | 46       | 1        |                 |   |             |                           |           |            |               | ]    |             | 96           | N        |          |        |           |          |          |          |       |          |          | 146        |           |          |          |              |   |          |          |          |               |
|          | 47_      | 1        |                 |   |             |                           |           |            |               |      |             | 97           | N.       |          |        |           |          |          |          | ].    |          |          | 147        |           |          |          |              |   |          |          |          |               |
|          | 48       | 1        |                 |   |             |                           |           |            |               | ]:   |             | 98           | Z        |          |        |           |          | $\Box$   |          | ]     |          |          | 148        |           |          |          |              |   |          |          |          |               |
|          | 49       | 1        |                 |   |             |                           |           |            |               | 1.1  |             | 99           | Z        |          |        |           |          | Ţ        |          | ′ ا   |          | _[       | 149        | ]         |          | _]       |              |   |          |          |          |               |
|          | 50       | 1        |                 |   | L.          |                           |           |            |               |      |             | 100          | N        |          |        |           |          |          |          |       | L        |          | 150        |           | $\Box$   |          |              | L |          |          |          |               |